

# Atascosa River TMDL Project: Impairment Verification Results

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Total Maximum Daily Load Program  
Strategic Assessment Division  
Texas Commission on Environmental Quality



# Water Quality Standards

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Use	Indicator	Criteria
High Aquatic Life	Dissolved Oxygen	5.0 mg/L Average
		3.0 mg/L Minimum



# Water Quality Standards

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Use	Indicator	Criteria
High Aquatic Life	Dissolved Oxygen	5.0 mg/L Average
		3.0 mg/L Minimum
Contact Recreation	Bacteria ( <i>E. coli</i> )	394 col/100 mL Single sample
		126 col/100mL Geometric Mean



# Current Status of 303(d) Listing

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## 2002 Water Quality Inventory and 303(d) List

Not supporting the **aquatic life use** due to depressed dissolved oxygen.

Instantaneous DO  24-hour DO

Not supporting the **contact recreation use** due to bacteria.

Fecal coliform  E. coli

# Potential Outcomes

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- 1. Conduct TMDL**
- 2. Adjust Water Quality Standard**  
(aquatic life use only)
- 3. Remove impairment from 303(d)  
List**
- 4. Collect additional data**

# Monitoring Plan

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**3 Stations within the area of impairment**  
*(one station added)*

**Field and chemical parameters sampled at  
least ten times**

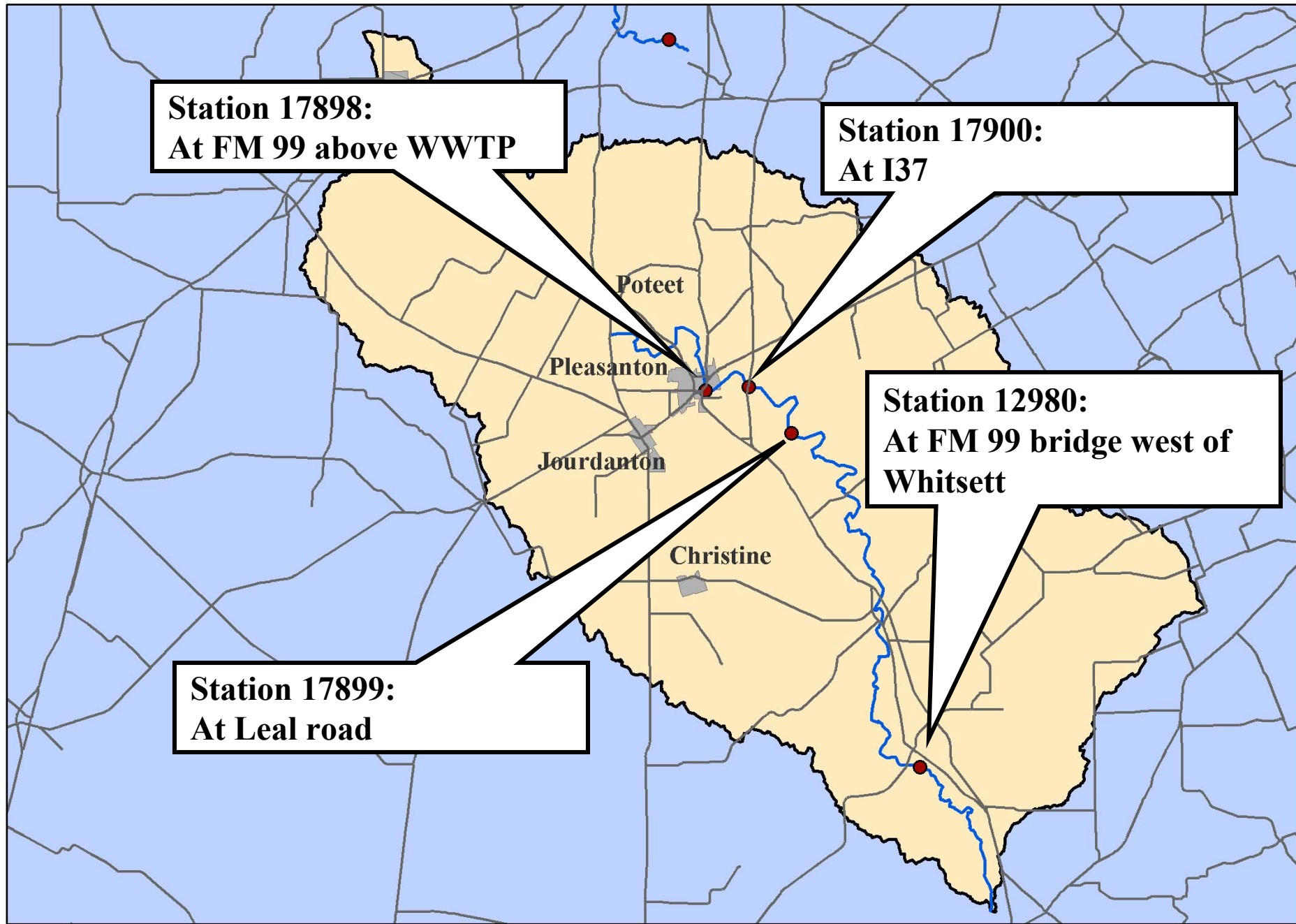
**Biological samples will be collected 3 times**

**Station 17898:**  
**At FM 99 above WWTP**

**Station 17900:**  
**At I37**

**Station 12980:**  
**At FM 99 bridge west of  
Whitsett**

**Station 17899:**  
**At Leal road**



# Impairment Verification Monitoring

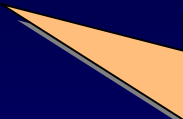
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**August 2002-August 2004**

**Field Parameters**

**Chemical Parameters**

**Biological Parameters**



**24-Hour Dissolved Oxygen  
Temperature  
Conductivity  
pH  
Flow**



# Impairment Verification Monitoring

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**August 2002-August 2004**

**Field Parameters**

**Chemical Parameters**

**Biological Parameters**

**Alkalinity**

**TSS**

**Sulfate**

**Chloride**

**Chlorophyll a**

**CBOD**

**Fecal coliform\E. coli**

# Impairment Verification Monitoring

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**August 2002-August 2004**

**Field Parameters**

**Chemical Parameters**

**Biological Parameters**

**Nekton Assessments**

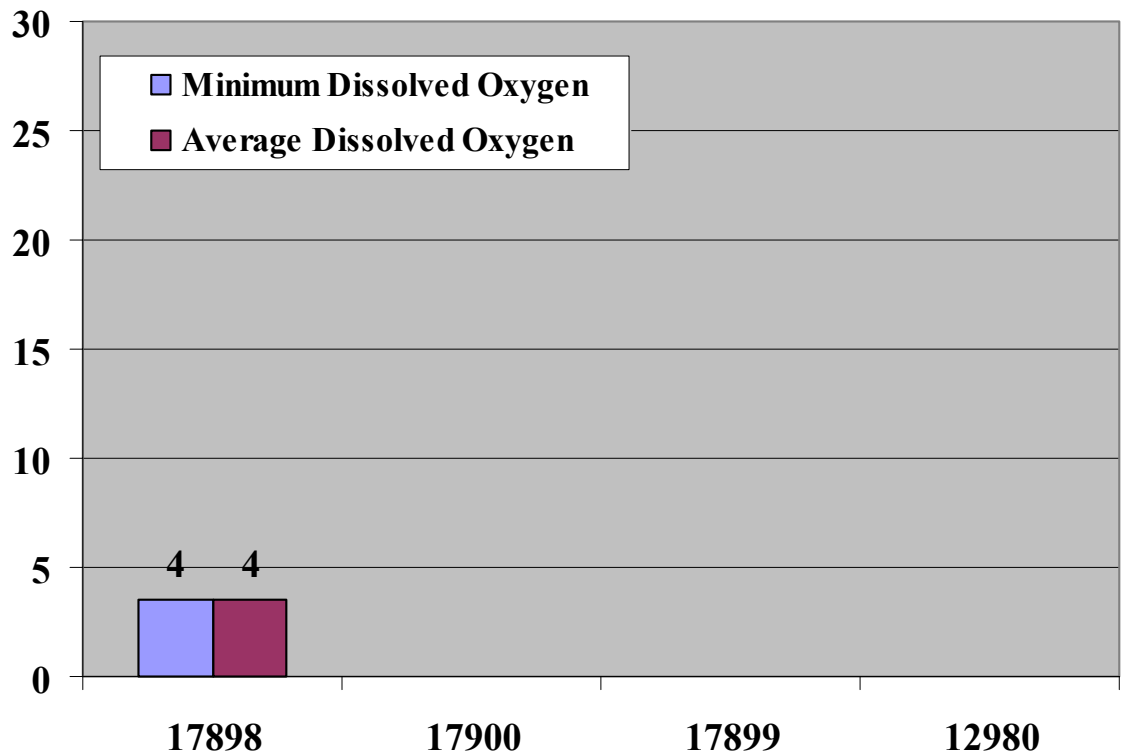
**Benthic Assessments**

**Habitat Assessments**

# Results

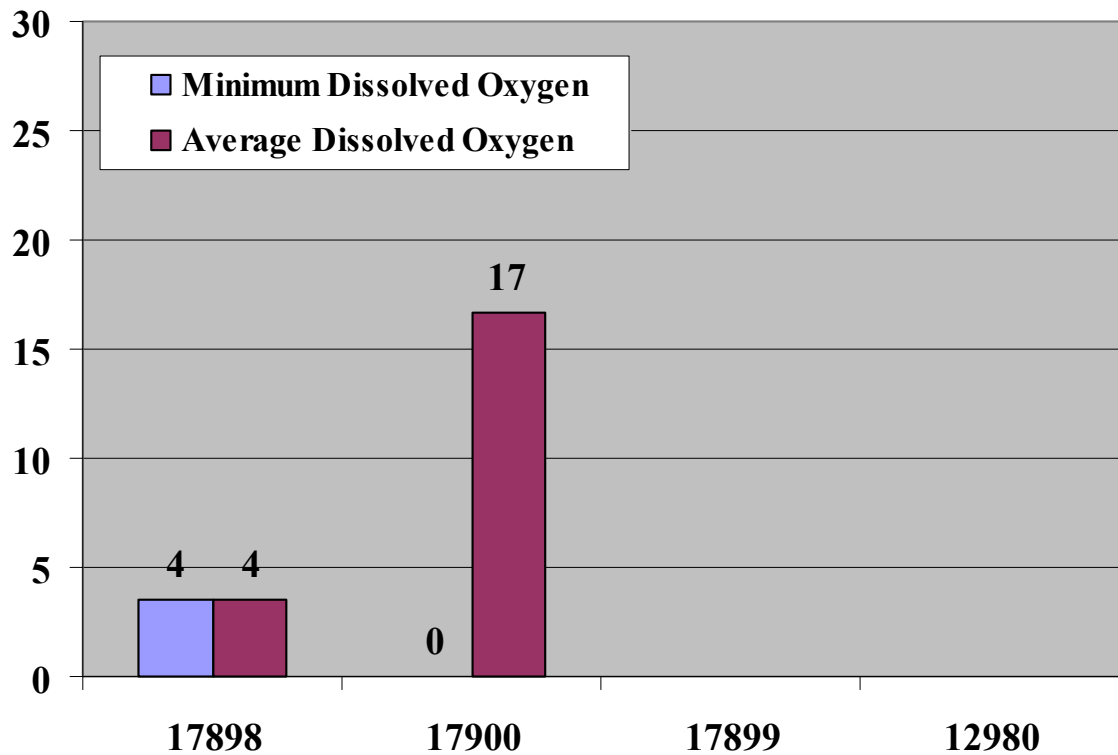
# Dissolved Oxygen Results

Station 17898



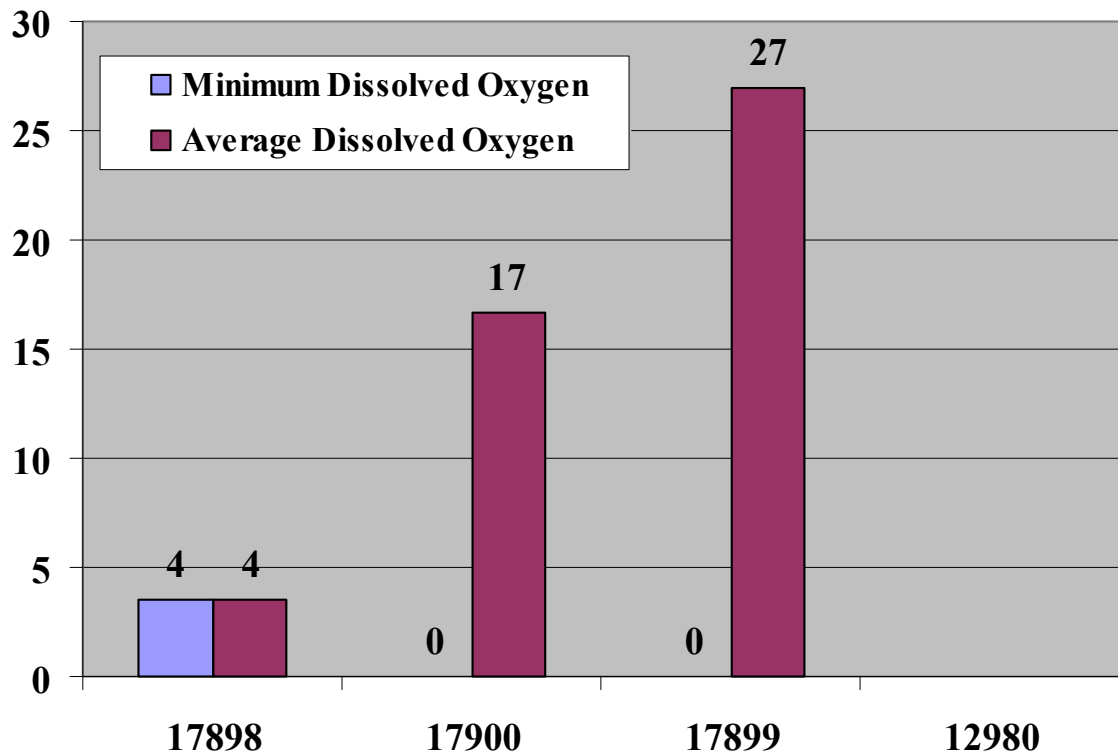
# Dissolved Oxygen Results

Station 17900



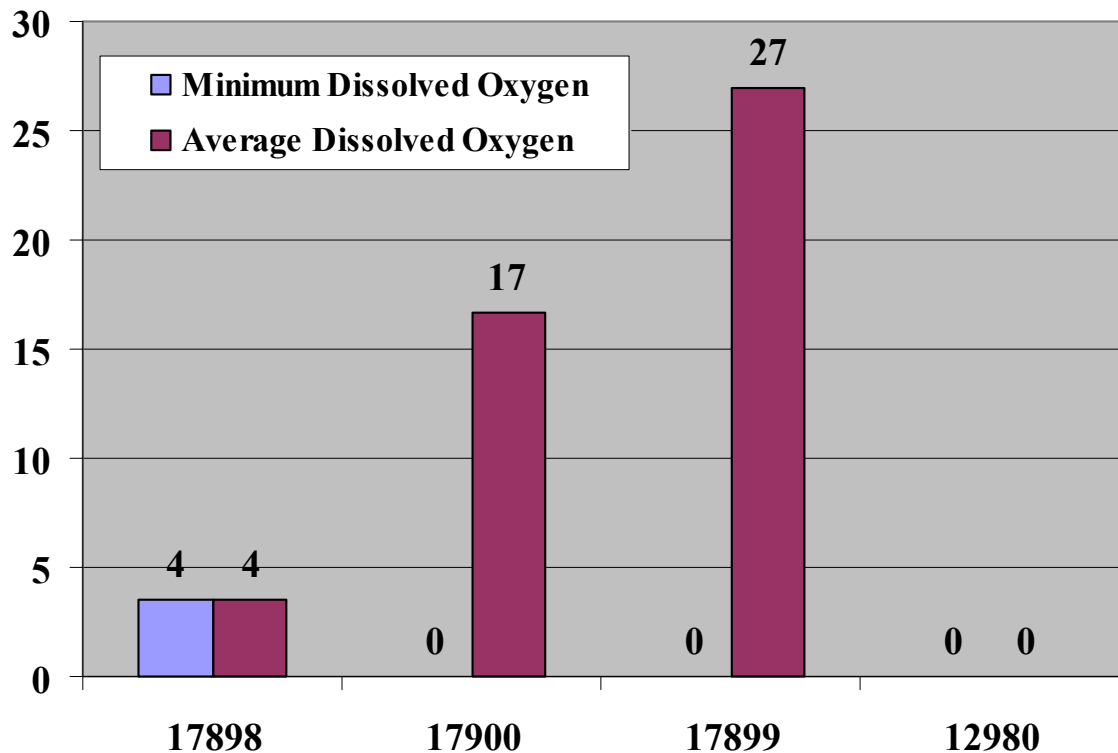
# Dissolved Oxygen Results

Station 17899



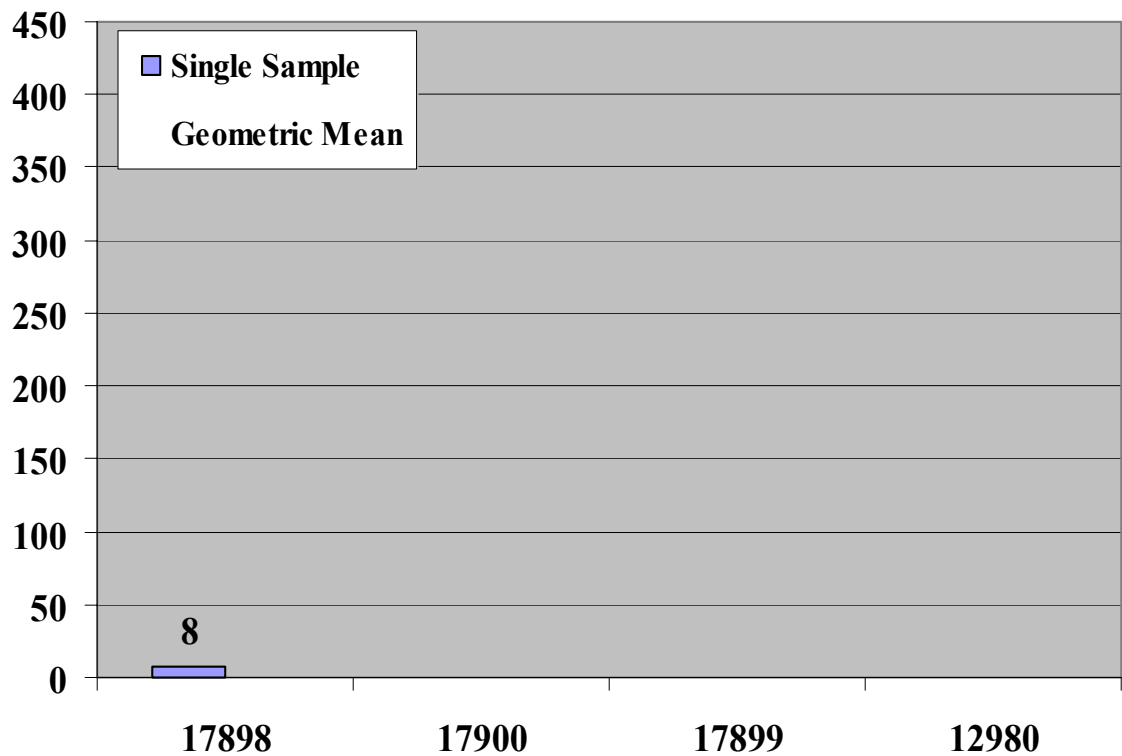
# Dissolved Oxygen Results

Station 12980



# Bacteriological Results

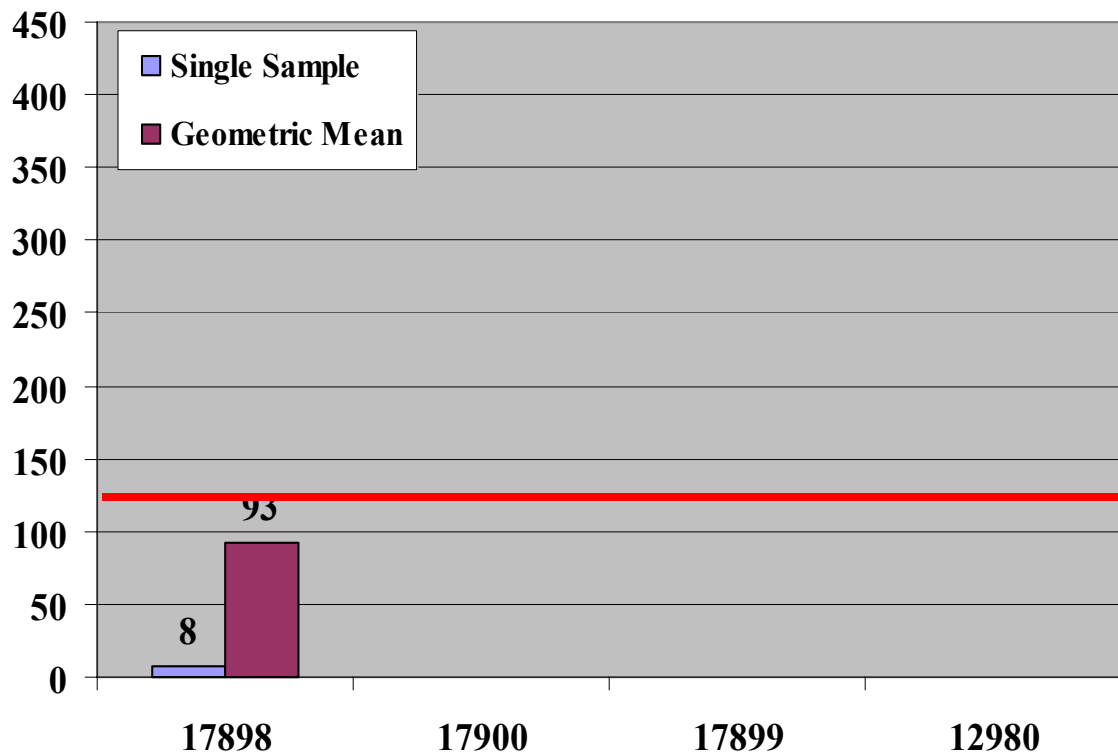
Station 17898





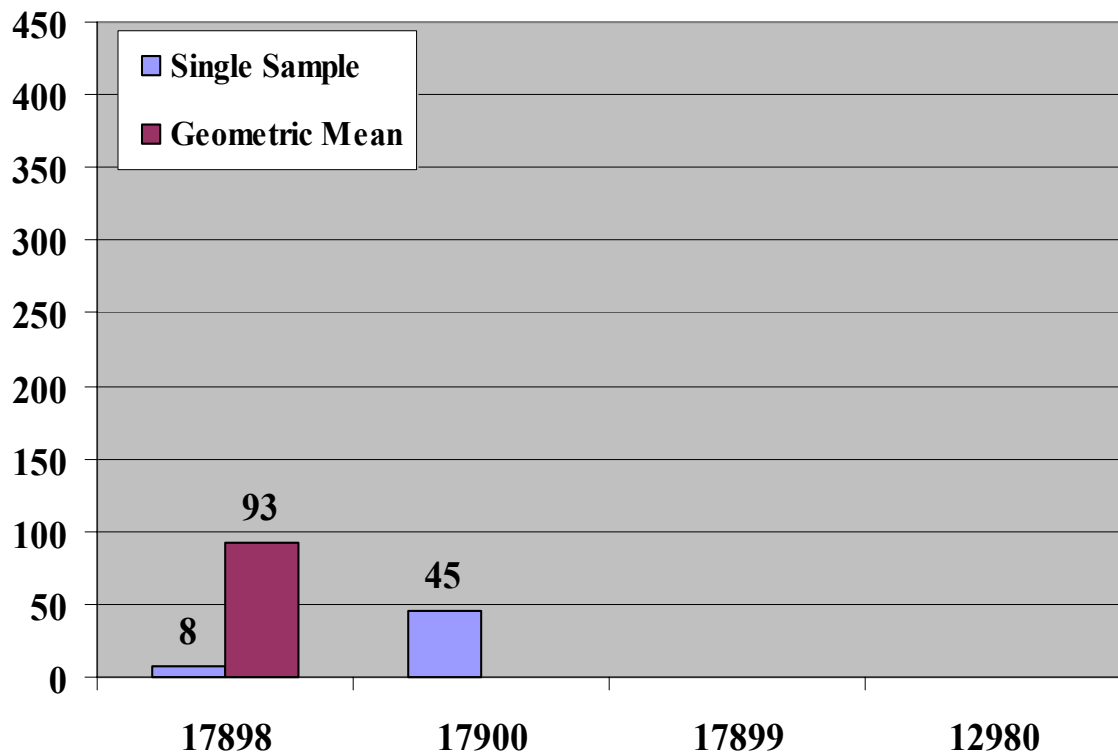
# Bacteriological Results

Station 17898



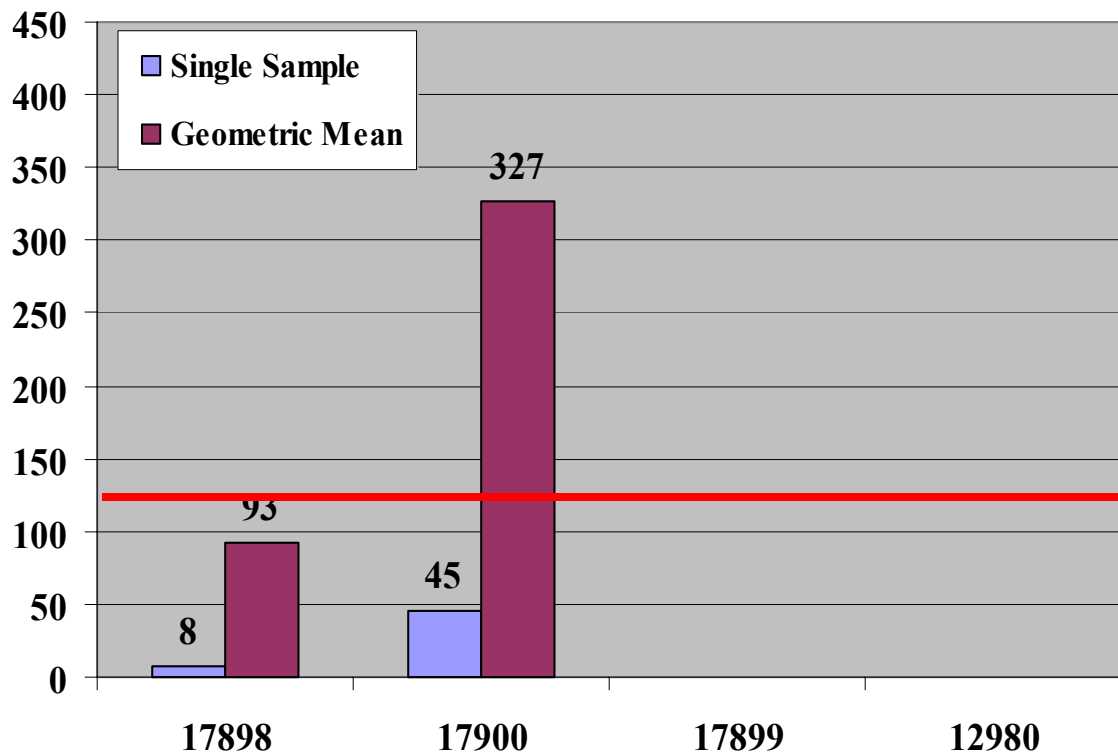
# Bacteriological Results

Station 17900



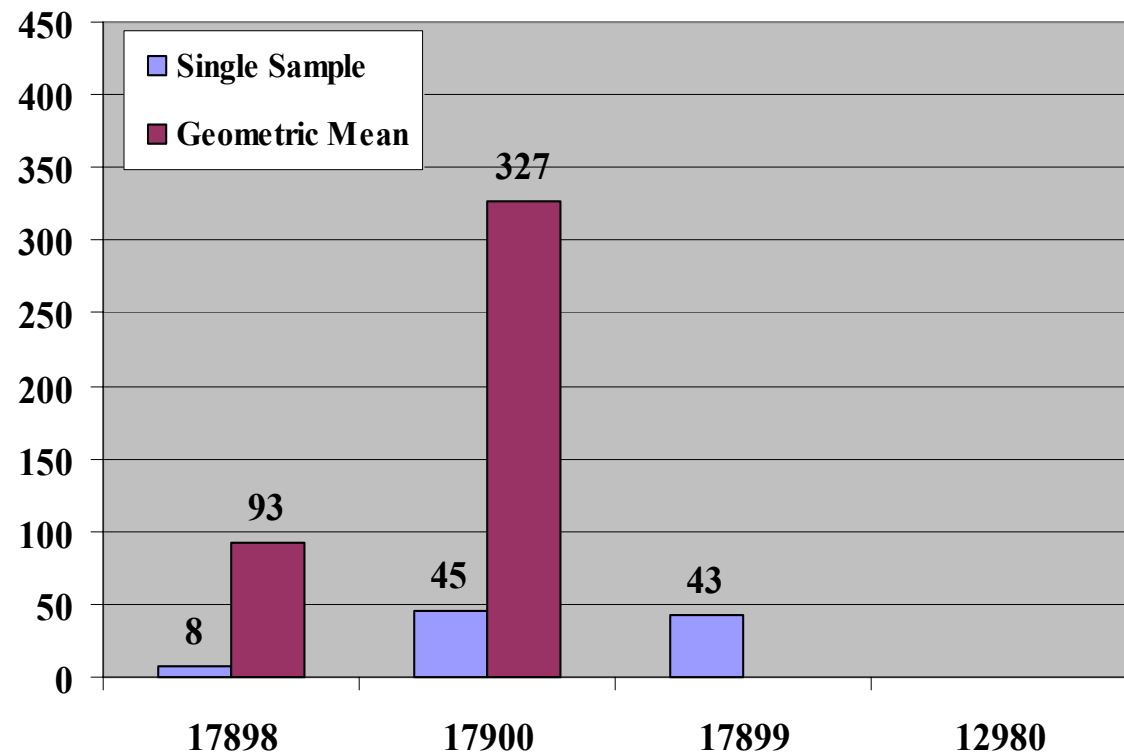
# Bacteriological Results

Station 17900



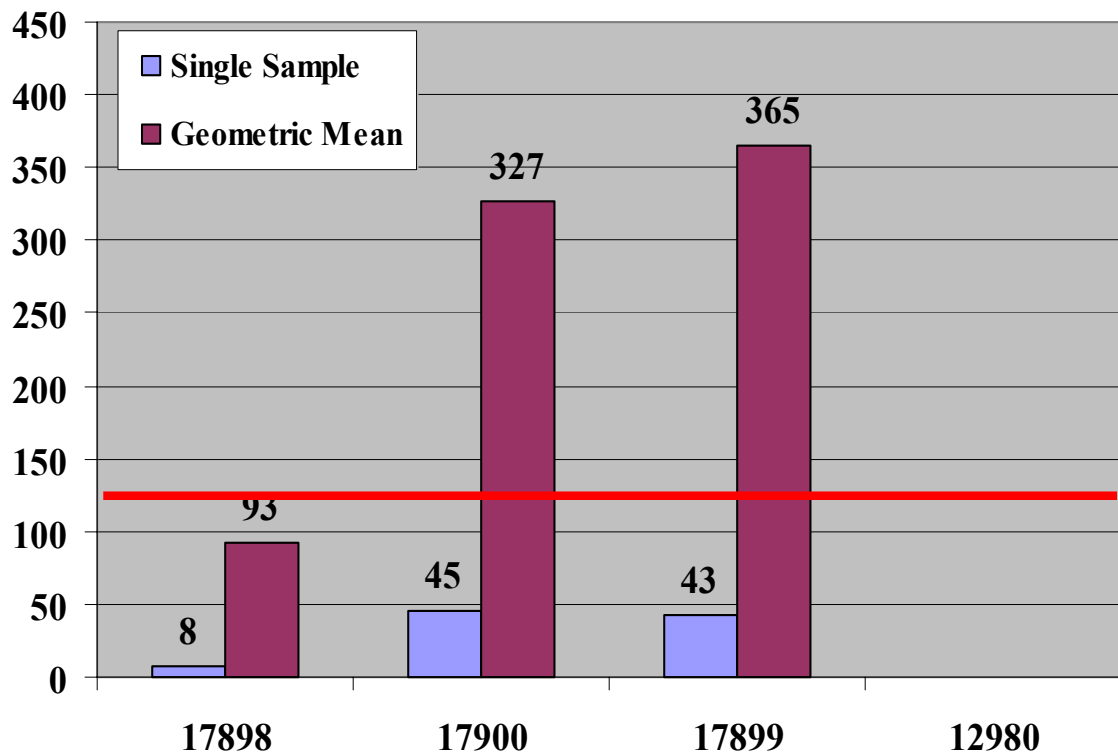
# Bacteriological Results

Station 17899



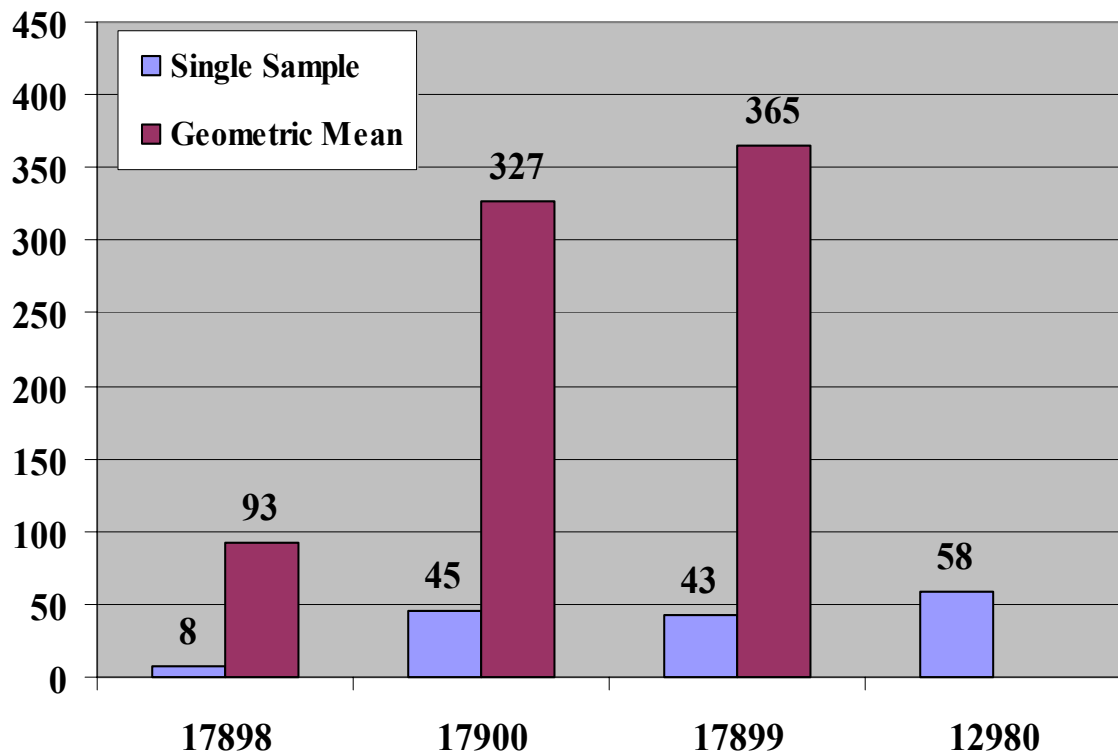
# Bacteriological Results

Station 17899



# Bacteriological Results

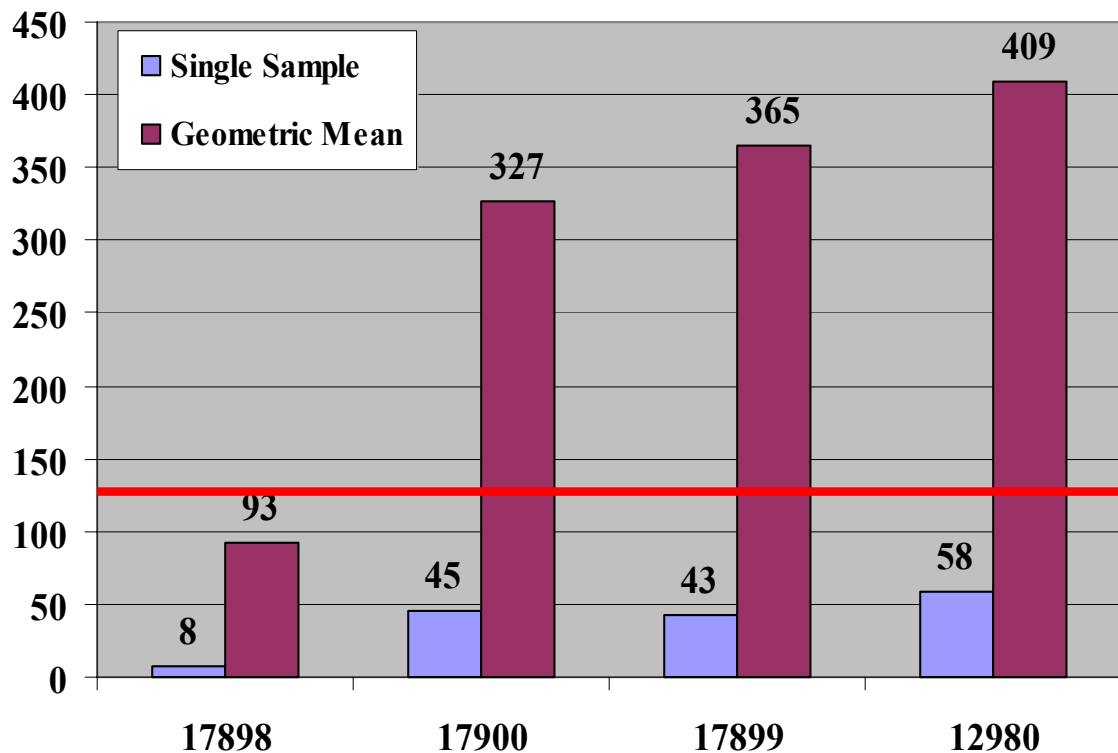
Station 12980

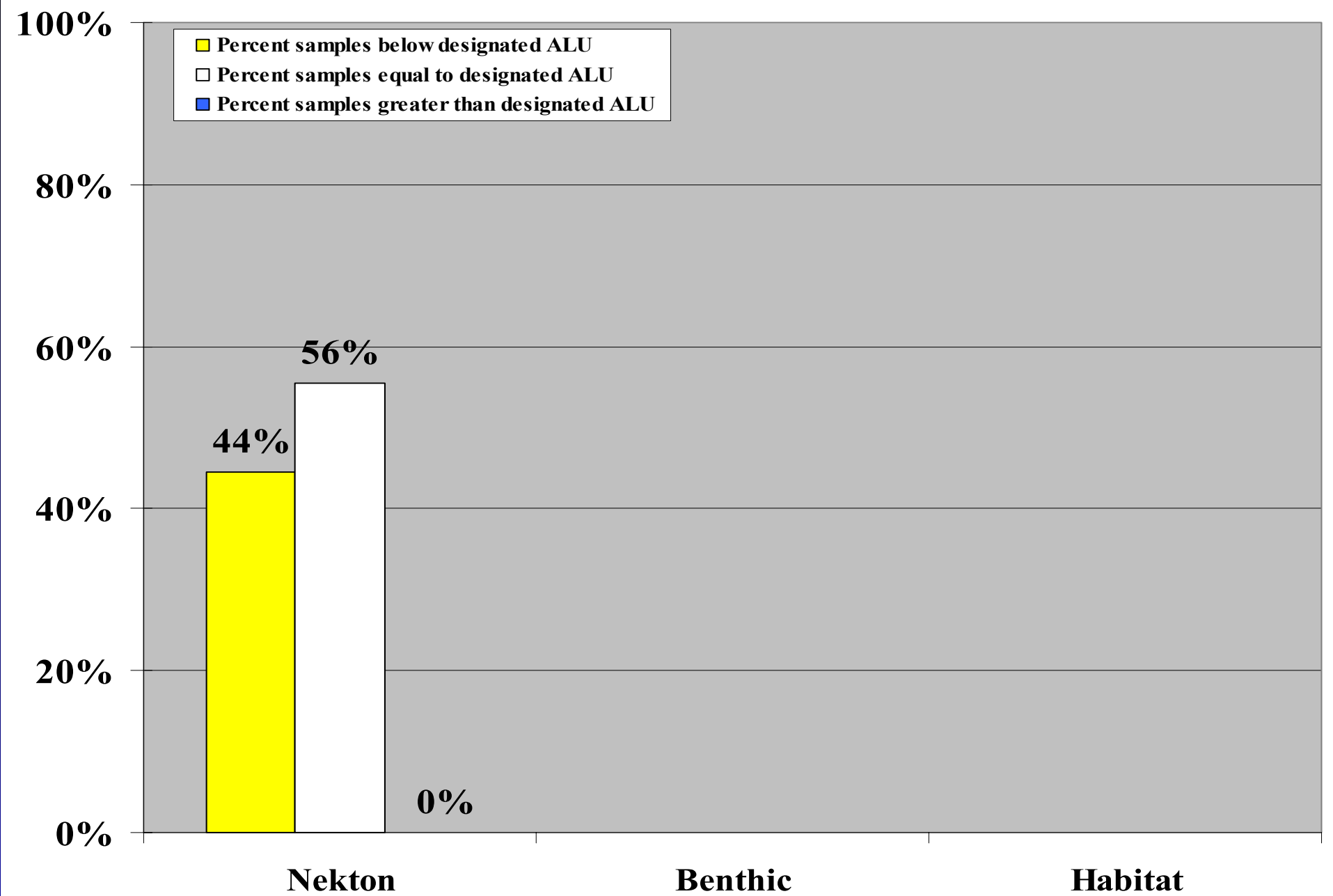




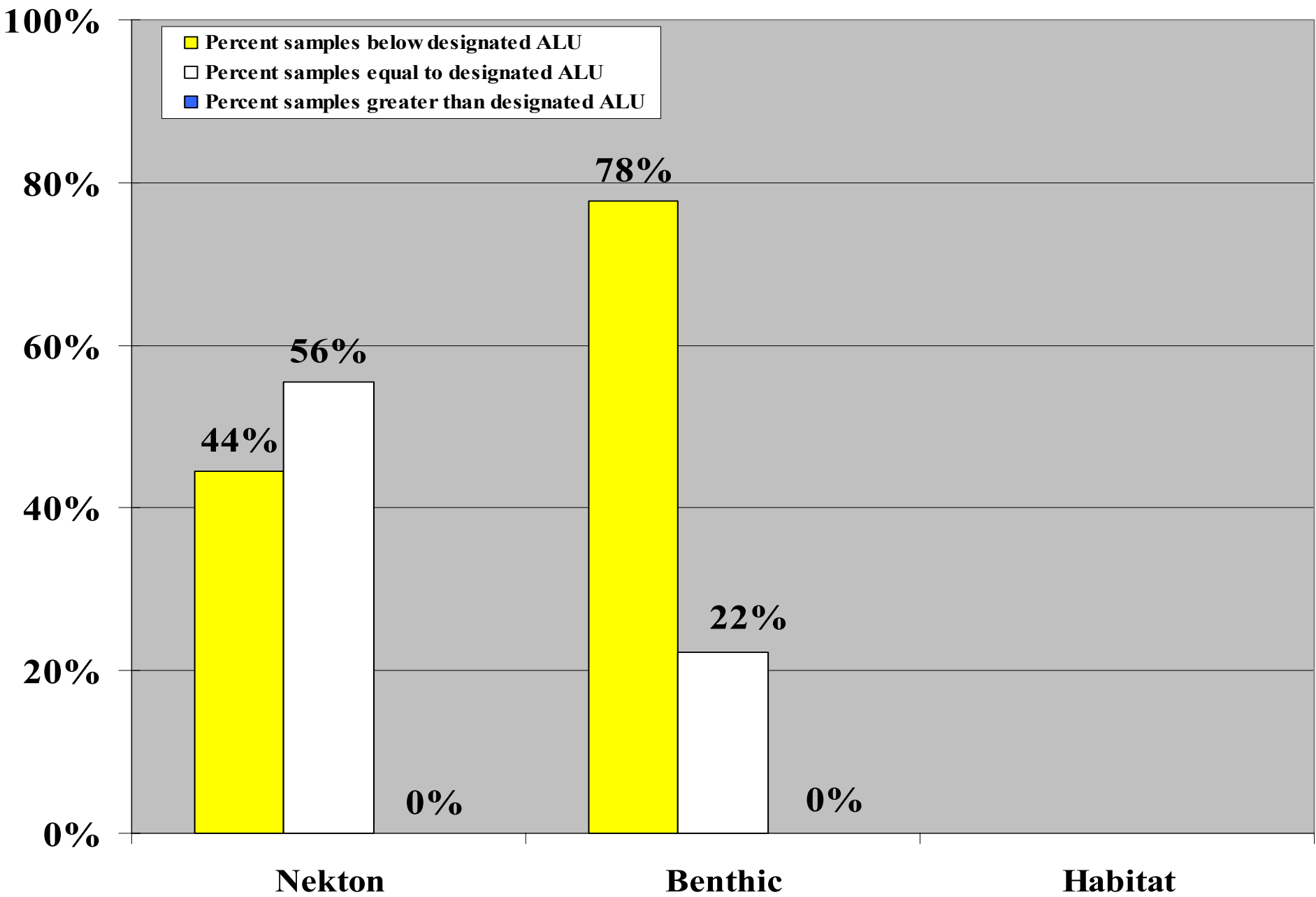
# Bacteriological Results

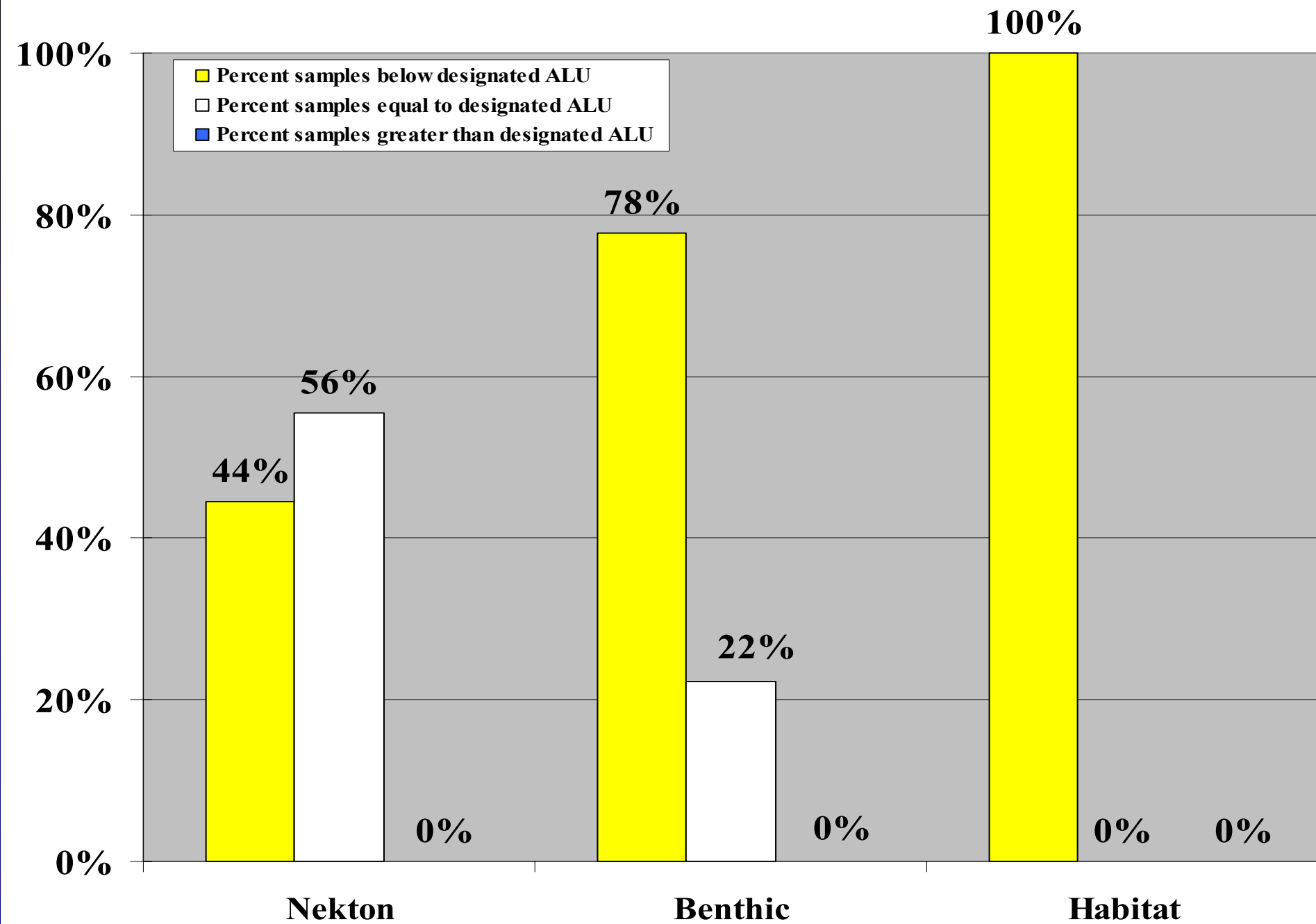
Station 12980











# **Aquatic Life Use Outcome**

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**1. Conduct TMDL**

**2. Adjust Water Quality Standard**  
(aquatic life use only)

**3. Remove impairment from 303(d)  
List**

**4. Collect additional data**

# **Recreational Use Outcome**

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**1. Conduct TMDL**

**2. Adjust Water Quality Standard**  
(aquatic life use only)

**3. Remove impairment from 303(d)  
List**

**4. Collect additional data**

[www.tceq.state.tx.us/water/  
quality/tmdl/](http://www.tceq.state.tx.us/water/quality/tmdl/)



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